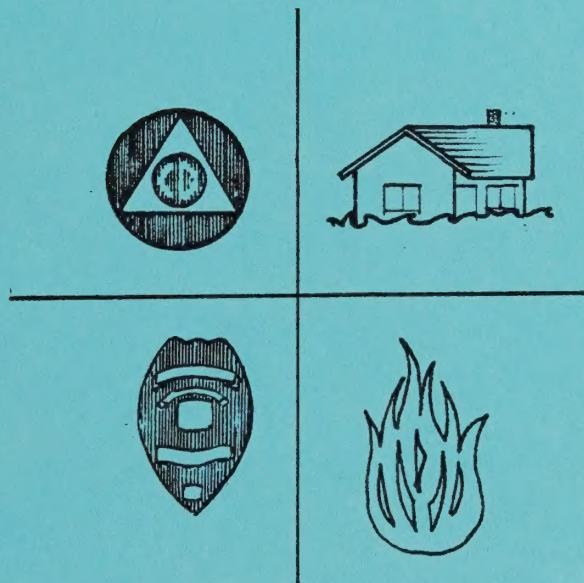


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**CITY OF PLEASANT HILL**

**SAFETY ELEMENT**

ADOPTED APRIL 4, 1983





86 00777

RESOLUTION NO. 20-83

A RESOLUTION OF THE CITY COUNCIL, CITY OF PLEASANT HILL, AMENDING THE GENERAL PLAN, ADOPTING THE SAFETY ELEMENT, AMENDING THE SCENIC ROUTES ELEMENT, AMENDING THE NOISE ELEMENT AND AMENDING THE LAND USE ELEMENT TO CHANGE THE DESIGNATION OF THE APPROXIMATE 9.34 ACRES AT THE TERMINUS OF CIVIC DRIVE FROM NEIGHBORHOOD PARK TO CIVIC CENTER AND AMENDING THE TEXT OF THE GENERAL PLAN TO REFLECT THE CHANGES

WHEREAS, the City Council, City of Pleasant Hill, as required by State Law (Title 7, Chapter 3, Article 5, et.al.) has reviewed the amendments to the General Plan as follows:

- 1) Safety Element;
- 2) Scenic Routes Element;
- 3) Noise Element; and
- 4) Land Use Element Amendment - Civic Center Plan; and

WHEREAS, after notice thereof having been duly, regularly and lawfully given, the City Council has held a Public Hearing on the amendments, has reviewed the proffered elements and Resolutions of the Planning Commission, and has examined all pertinent maps and finds that the General Plan should be amended.

NOW, THEREFORE, BE IT RESOLVED that the City Council hereby adopts the following General Plan Amendments as shown on the attached documents labeled:

Exhibit "A" - Safety Element

Exhibit "B" - Scenic Routes Element

Exhibit "C" - Noise Element

Exhibit "D" - Land Use Element - Civic Center Plan

ADOPTED by the City Council, City of Pleasant Hill at a meeting of said Council regularly held on the 4th day of April, 1983, by the following vote:

Ayes: Cooper, Mulhall, Weldon, Holmes

Noes:

Absent: Mustard

OLIVER L. HOLMES, Mayor

Attest:

WETONA L. CRAWFORD, City Clerk



# SAFETY

## INTRODUCTION

This document establishes safety objectives and the planning process. General safety involves the protection of the community from fire and flood. Safety hazards such as wild fires, flooding, and other hazards are also included.

## POLICIES & IMPLEMENTATION PROGRAMS

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## SAFETY GOAL

TO REDUCE THE POTENTIAL FOR INJURY, LOSS OF LIFE, AND DAMAGE TO PROPERTY DUE TO FIRE, FLOODING, AND OTHER HAZARDS.

The goal establishes the safety objectives that will be achieved through the policies and implementation programs. The goal is to reduce the potential for injury, loss of life, and damage to property due to fire, flooding, and other hazards.

The goal establishes the safety objectives that will be achieved through the policies and implementation programs. The goal is to reduce the potential for injury, loss of life, and damage to property due to fire, flooding, and other hazards.



October 19, 1963

Dear Mr. [Name]:

I have your letter of October 17, 1963, regarding the [Subject]. I am sorry that I cannot give you a more definitive answer at this time, but the [Subject] is still under review.

I will be sure to let you know as soon as a final decision has been reached. In the meantime, please let me know if you have any further questions or if there is anything else I can do to assist you.

Sincerely,  
[Signature]

# SAFETY

---

## INTRODUCTION

This element introduces safety considerations into the planning process. General Safety involves the protection of the community from fire and floods. Safety hazards such as wild fires, criminal activity, flooding and major disasters are also included.

There is no such thing as a hazard-free environment. In well-planned communities, hazards are identified and means and costs of mitigation set forth. The required degree of mitigation is determined by the community based on the facts and costs (both monetary and non-monetary). For example, fire is always a potential hazard. This hazard could be greatly diminished through fire-resistant construction, control over combustible building contents and provision of additional personnel to perform immediate fire fighting. These measures are not usually employed because of the increased building costs and the expense of providing additional fire fighters. Consequently, the community limits the resources applied to fire fighting. The extent that resources are allocated to public safety is based on the level of risk that the City is willing to accept.

## SAFETY GOAL

**TO REDUCE THE POTENTIAL FOR INJURY, LOSS OF LIFE, AND DAMAGE TO PROPERTY DUE TO FIRE, FLOODING, AND OTHER HAZARDS.**

The goal establishes the basis for making Pleasant Hill a safer place to live. The policies and implementation programs support the goal by establishing a direction and defining commitments, and thus, are the essence of the element.

## POLICIES & IMPLEMENTATION PROGRAMS

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The devastating wildland fires of Southern California in September and October, 1970 brought attention to the need for cities to plan for fire safety. It was recognized that major fires were not only possible in the southern portion of the State, but could occur in any location. Consequently, the State mandated that each City prepare for major fires in its General Plan.

Pleasant Hill contains two basic environmental settings - rural hillsides and developed suburban residential areas. The greatest degree of fire risk is borne by residents and property owners in the hillside areas, many of which are located outside the corporate limits. To evaluate the potential for severe fires, the State Division of Forestry developed a scale of critical fire conditions and factors, see Figure No. 1, which is based on the degree of slope (steepness), the vegetative cover (fuel) and the critical fire weather (dryness).

The *slope* criteria reflects the concept that steeper slopes have a fire spreading effect similar to higher velocity winds, thus, are potentially more hazardous. *Fireloading* refers to the differing amount of fuel provided by vegetation types. The scale indicates that as denseness of vegetation increases, so does the degree of hazard. Finally, the *critical fire weather* refers to atmospheric humidity or dryness. This factor is based on the assumption that the dryer and warmer an area is, the higher the probability for a major fire. Utilizing the later criteria, the entire City is in the Class II Zone.

# SAFETY

## REVISIONS IDENTIFICATION SYMBOLS

## INTRODUCTION

This manual is a guide to the safe use of the equipment described herein. It is intended for use by personnel who are responsible for the operation and maintenance of the equipment. It is not intended to be a substitute for the manufacturer's instructions or the operator's manual.

The purpose of this manual is to provide the user with the information necessary to operate the equipment safely and effectively. It is intended to be a guide to the safe use of the equipment and is not intended to be a substitute for the manufacturer's instructions or the operator's manual. The user should read this manual carefully and follow the instructions provided. The user should also read the manufacturer's instructions and the operator's manual for the equipment. The user should also read the safety instructions provided with the equipment. The user should also read the safety instructions provided with the equipment. The user should also read the safety instructions provided with the equipment.

## SAFETY GOAL

TO PROVIDE THE USER WITH THE INFORMATION NECESSARY TO OPERATE THE EQUIPMENT SAFELY AND EFFECTIVELY.

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Applying these standards, high and extreme fire hazard areas can be seen in Figure No. 2. The degree of hazard to life and property created by the natural conditions in these areas can be mitigated by a reduction in density, road improvements for evacuation of inhabited areas, sufficient fire fighters, adequate water supply, and effective building codes and inspections.

The City is responsible only for land use (density and road improvements) and code enforcement. Fire fighting and water supply functions are provided by special districts.

Fire protection for the residents of Pleasant Hill is provided by the Contra Costa County Consolidated Fire District, which serves all of Central Contra Costa County. It is the district's responsibility to provide fire prevention and fighting services. In cooperation with the district, the City ensures that:

- 1) development does not occur in areas of excessive fire hazard; 2) proper access for emergency vehicles is available; 3) residents can be effectively evacuated; and 4) development meets the latest building and fire prevention codes.

There are several water districts operating within Pleasant Hill. Each has developed policies which prohibit development where adequate water cannot be provided for both domestic service and emergency fire fighting.

POLICY "A" Fire Protection in the Hillside Areas

*The City of Pleasant Hill shall cooperate with the Contra Costa County Consolidated Fire District to reduce the potential for fires in all hillside areas.*

Implementation Programs

- A.1 Areas with extreme fire hazards will be designated for low-low density residential or open space use.
- A.2 An adequate water supply capable of supplying sufficient flow for fire protection shall be provided for all new development.

**FIGURE NO.1**

**FIRE HAZARD SEVERITY SCALE**

CRITICAL FIRE WEATHER FREQUENCY FUEL LOADING ▼	I			II			III		
	% SLOPE			% SLOPE			% SLOPE		
	0-40	41-60	61+	0-40	41-60	61+	0-40	41-60	61+
LIGHT (Grass)									
MEDIUM (Chapparal)									
HEAVY (Woodland)									

Moderate Hazard
  High Hazard
  Extreme Hazard

1. The first part of the report is a summary of the work done during the period covered by the report. This summary is intended to give a brief overview of the work done and the results obtained.

2. The second part of the report is a detailed account of the work done during the period covered by the report. This part is intended to give a more complete picture of the work done and the results obtained.

3. The third part of the report is a discussion of the results obtained during the period covered by the report. This part is intended to give a more complete picture of the work done and the results obtained.

4. The fourth part of the report is a conclusion of the work done during the period covered by the report. This part is intended to give a more complete picture of the work done and the results obtained.

# FIGURE NO. 1

This figure shows the results of the work done during the period covered by the report.

Date	Time	Location	Remarks
1944	10:00	1000	1000
1944	10:00	1000	1000
1944	10:00	1000	1000

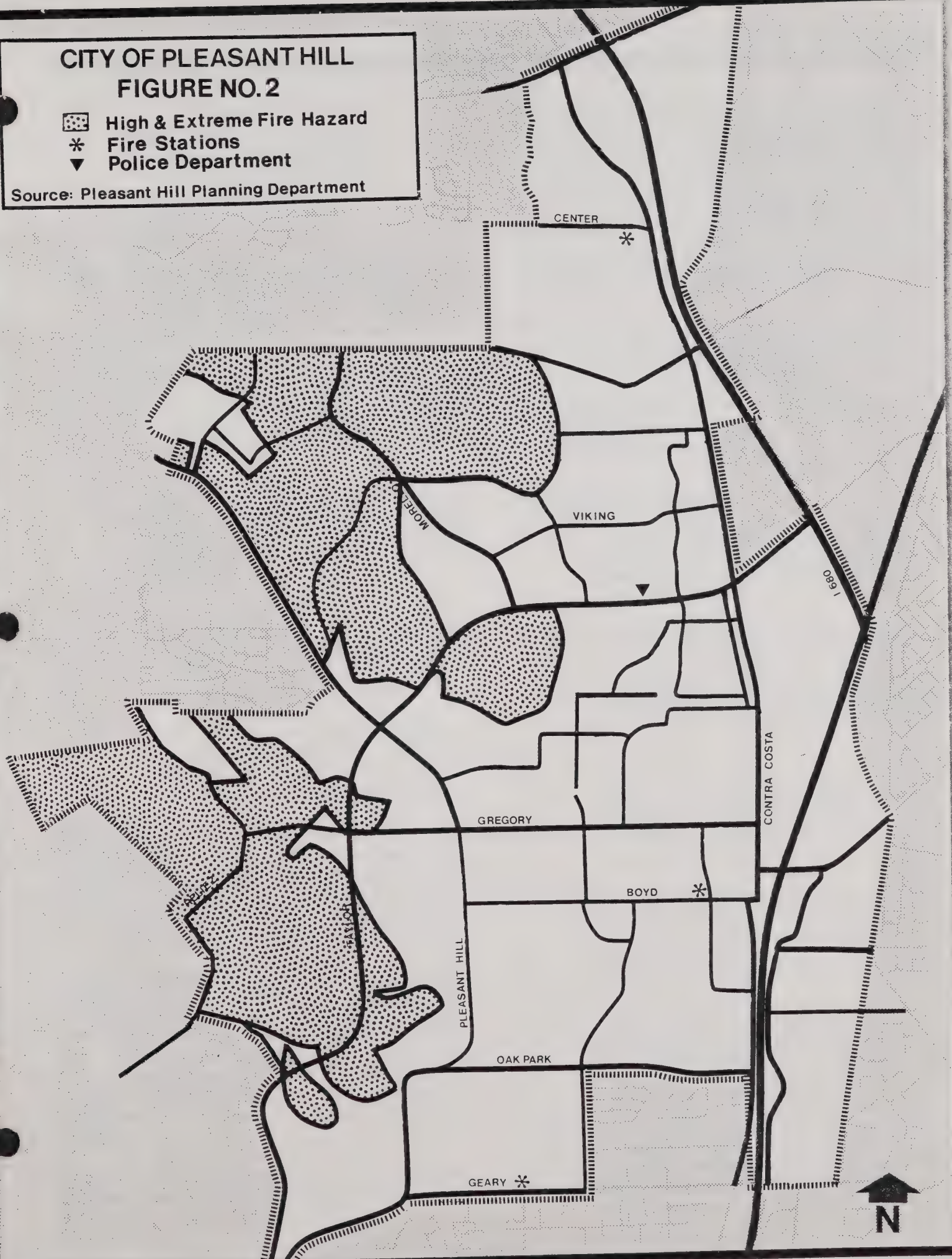
This figure shows the results of the work done during the period covered by the report.



# CITY OF PLEASANT HILL FIGURE NO.2

- High & Extreme Fire Hazard
- \* Fire Stations
- ▼ Police Department

Source: Pleasant Hill Planning Department







- A.3 All new buildings in hillside areas shall have fire retardant roof covering. Flammable exterior wall coverings, such as wood shingles, shall be prohibited.
- A.4 Access roadways shall be provided with all-weather unobstructed driving surfaces of not less than 20 feet in width.
- A.5 Access to open space or trail systems for public or private use shall be provided in all new development to the satisfaction of the Fire District.
- A.6 The City and Fire District will cooperate to ensure adequate weed and vegetation abatement is followed in hillside areas, including the following:
  - a) All combustible grasses, weeds, and brush shall be removed by homeowners for a distance of not less than 30 feet from all buildings and structures.
  - b) All open space, whether public or private, left in a natural state shall meet the Fire District's weed abatement standards.

Most of the City of Pleasant Hill is outside of hillsides and developed with low density single family residential subdivisions. The amount of industrial and commercial development is relatively minor; and what has been built is generally new and in good repair.

The fire risk in a suburban setting such as Pleasant Hill's is based upon the building characteristics including the construction techniques and materials. While the City and Fire District utilize the Uniform Building Code to regulate building construction, it is possible to improve upon the basic standards with innovative products and procedures.

Even with the best built-in fire reduction systems, there will be a need for rapid response to fire emergencies. The City

and Fire District support the accepted standards for a fire response of between 4 and 6 minutes. This response time requires that fire stations be within a mile and a half of all residential areas. To this end, the District maintains three fire stations in the City's Planning Area, as can be seen in Figure No. 2. These stations achieve the accepted standards for all areas of the City, except the hillsides.

POLICY "B" Fire Protection in the Urbanized Areas

*Develop and implement fire standards to ensure a safe work and living environment.*

Implementation Programs

- B.1 The City will continually update its Building Code to reflect changes in the Uniform Building Code and Uniform Fire Code.
- B.2 Develop an Ordinance that requires all new commercial and office buildings to provide an independent fire suppression system, including, but not limited to, automatic sprinklers.
- B.3 Develop standards which ensure that all residential units are designed to retard the spread of fire to adjacent units or dwellings.
- B.4 Develop standards which require all senior citizen housing projects and developments to be protected with automatic fire sprinkler systems.
- B.5 The City will continue to cooperate with the Fire District in reviewing material and construction techniques on all new construction and remodeling.
- B.6 Revise all commercial and industrial zoning districts to require a use permit for any business storing or utilizing flammable material.





Traditionally, cities provide two basic public safety functions - fire and police protection. As has been shown, the City shares the fire protection function with the Contra Costa County Consolidated Fire District. Police protection is provided solely by the City. Though not required by the State, it is also important to articulate the City's police policies in the General Plan.

The City of Pleasant Hill subscribes to the concept of "defensible space," which has become a popular planning and policing tool applicable to many communities. Simply stated, "defensible space" uses architectural design to create a physical environment which enable inhabitants of that environment to monitor activities and thereby reduce the likelihood of criminal behavior.

In the past, the City has stressed the need to provide visual privacy for individuals, yet occasionally this emphasis isolated households and caused residents to lose the feeling of possession of semi-private and public areas within the immediate neighborhood. The first way the City can increase personal safety is to ensure that new developments are designed to integrate personal spaces with public space to increase social cohesion within the development.

A second way to increase safety is to stress neighborhood cohesion through the development of homeowner and neighborhood associations. The City has actively supported neighborhood awareness programs to advise citizens regarding crime prevention on their property and to act collectively to encourage neighborhood cohesiveness through the Police Department Crime Prevention Bureau.

The use of design techniques to prevent crime in commercial districts is more direct. The key is not the creation of social cohesiveness, but rather to design structures to ease the patrol operation of the police officers and to aid community surveillance. Decisions involving crime prevention in commercial areas sometimes involve trade-offs be-

tween aesthetics and ease of access for patrol vehicles as well as visual privacy and acoustical separation between commercial properties and adjoining residential uses. In cases where conflicts between uses occur it should be the responsibility of the commercial user to mitigate any potential negative effects through the use of walls, landscaping, and site planning.

#### POLICY "C" Crime Prevention

*Provide an environment which provides for privacy yet discourages criminal activity.*

#### Implementation Programs

- C.1 Continue to support neighborhood associations in providing unified and cohesive organizations which help deter criminal activity.
- C.2 Continue the utilization of the Police Crime Prevention Bureau in educating citizens in methods of protecting their properties.
- C.3 Crime prevention shall be considered in a review of all developments within the City, thus all applications for subdivisions, construction or rehabilitation of commercial buildings shall be referred to the Police Department.
- C.4 Continue to review, revise and enforce the City's Building Security Ordinance.

The final major safety hazard significant enough to require attention in the Safety Element is the threat of flooding. Since incorporation in 1961, much has been done to alleviate





the potential for flooding including clearing creeks and backyard ditches of weeds and debris, and the continued monitoring and implementation of erosion control practices. In conjunction with the Contra Costa County Flood Control and Water Conservation District, the City has provided funding to build new drainage facilities.

The City has also cooperated with the National Flood Insurance Agency in identifying areas with significant flooding potential and helped residents to obtain flood insurance. Thus, in the event of a 100 or 500 year flood, homes within designated flood areas would be eligible for assistance.

Despite all the City's efforts, flooding is still likely to occur in the future. Flooding is most often the result of excessive rain falling in a relatively short period of time. For example, over a 72 hour period, 7.75 and 10.43 inches of rain fell in 1955 and 1963, respectively, resulting in 20 and 35 year floods. The terms 50 year flood and 100 year flood are based on the magnitude of that flooding and a comparison of the floods frequency of recurrence. Stated differently, the term 100 year flood refers to a flood so severe it would probably happen only once in a century. This does not mean floods occur at evenly spaced intervals. On the contrary, two or more floods of a 100 year magnitude can happen in close succession. Additionally, the difference between a 50 year and 100 year flood is not in a doubling of the amount of rain or depth of water. In many cases, the difference between the two flood designations is less than a foot of standing water at any single location in Pleasant Hill or several additional inches of rain during a relatively short period of time.

The drainage system in Pleasant Hill carries storm waters to major channels which in turn contain and transport the flow northward to Suisun Bay. In order for the drainage system to function effectively the amount of water entering the system, or the peak flow, must be kept within design capacity and the

drainageways within the system kept free of silt and other debris to maintain capacity at its highest level.

Murderers Creek and Grayson Creek (see Figure No. 3) are the City's major drainage channels. As can be seen, Grayson Creek incorporates Murderers Creek south of Gregory Lane whereupon it flows northward to the Walnut Creek.

South of their junction, both Grayson and Murderers Creeks suffer from severely eroding banks because neither creek is concrete lined. Occasionally, silt builds up retarding water flow and limiting creek capacity. To achieve adequate flow capacity these creeks must be cleaned and drained every several years.

The major creeks in Pleasant Hill are part of a greater Countywide flood control program developed by the Contra Costa County Flood Control and Water Conservation District, a separate governing body from the County government. The district, under State law, is enabled to develop an overall coordinated flood control program for the County. The District developed a multi-tiered system utilizing Flood Control Drainage Areas and Storm Drainage District Zones, to mitigate flooding problems.

The largest designated areas for flood control are the Flood Control Drainage Areas which contain drainage basins greater than four square miles. There are 13 such areas throughout the County, with Pleasant Hill being in Zone 3B, also known as the Walnut Creek Watershed. Grayson Creek is a tributary to this watershed.

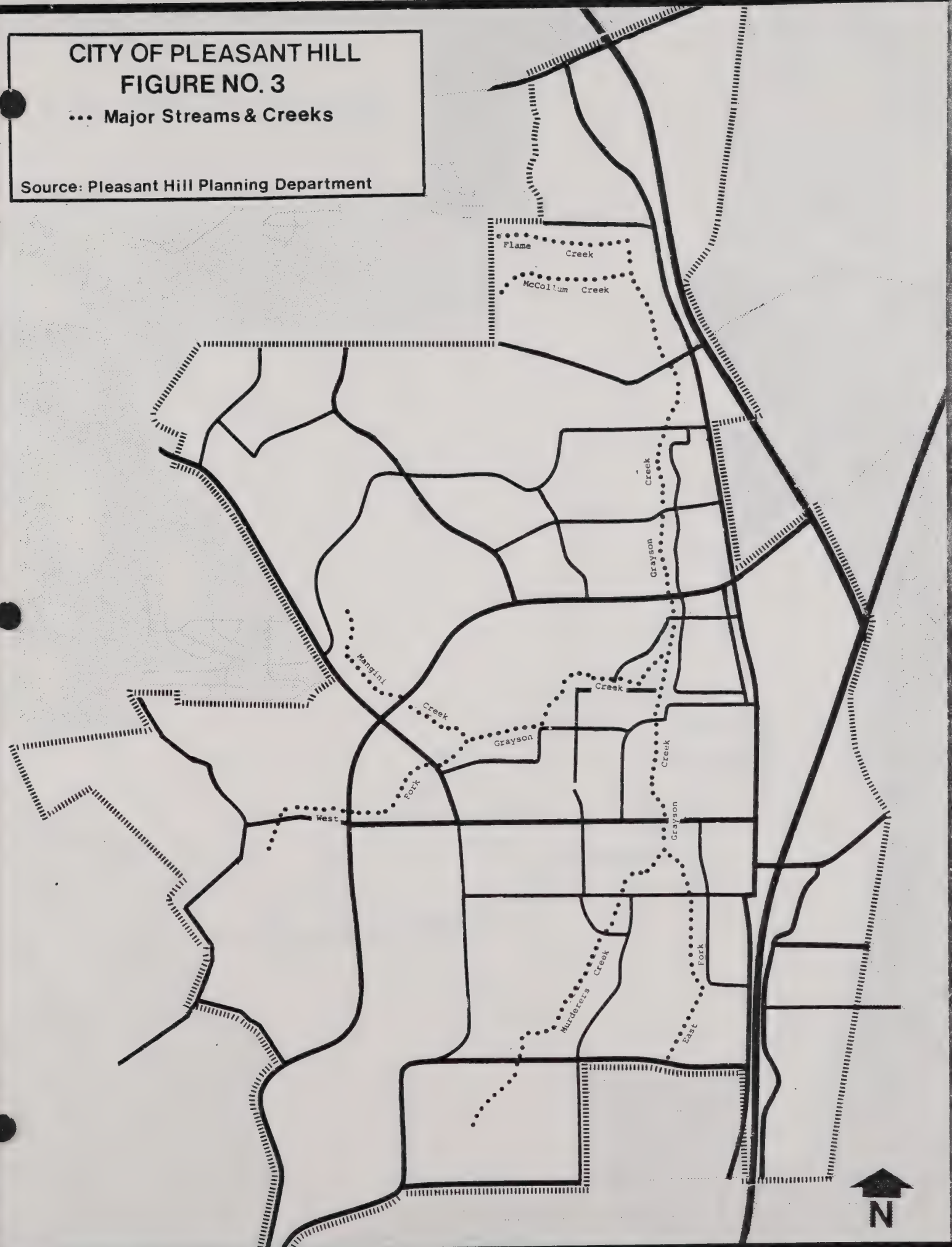
The next tier is for the smaller watersheds that range from one to four square miles and are referred to as Storm Drainage District Zones. In Pleasant Hill there are six storm drainage district zones (see Figure No. 4), the improvements on three have been completed. The projects in Pleasant Hill that have been proposed and are either under construction or finished are shown in Figure No. 5.



CITY OF PLEASANT HILL  
FIGURE NO. 3

... Major Streams & Creeks

Source: Pleasant Hill Planning Department



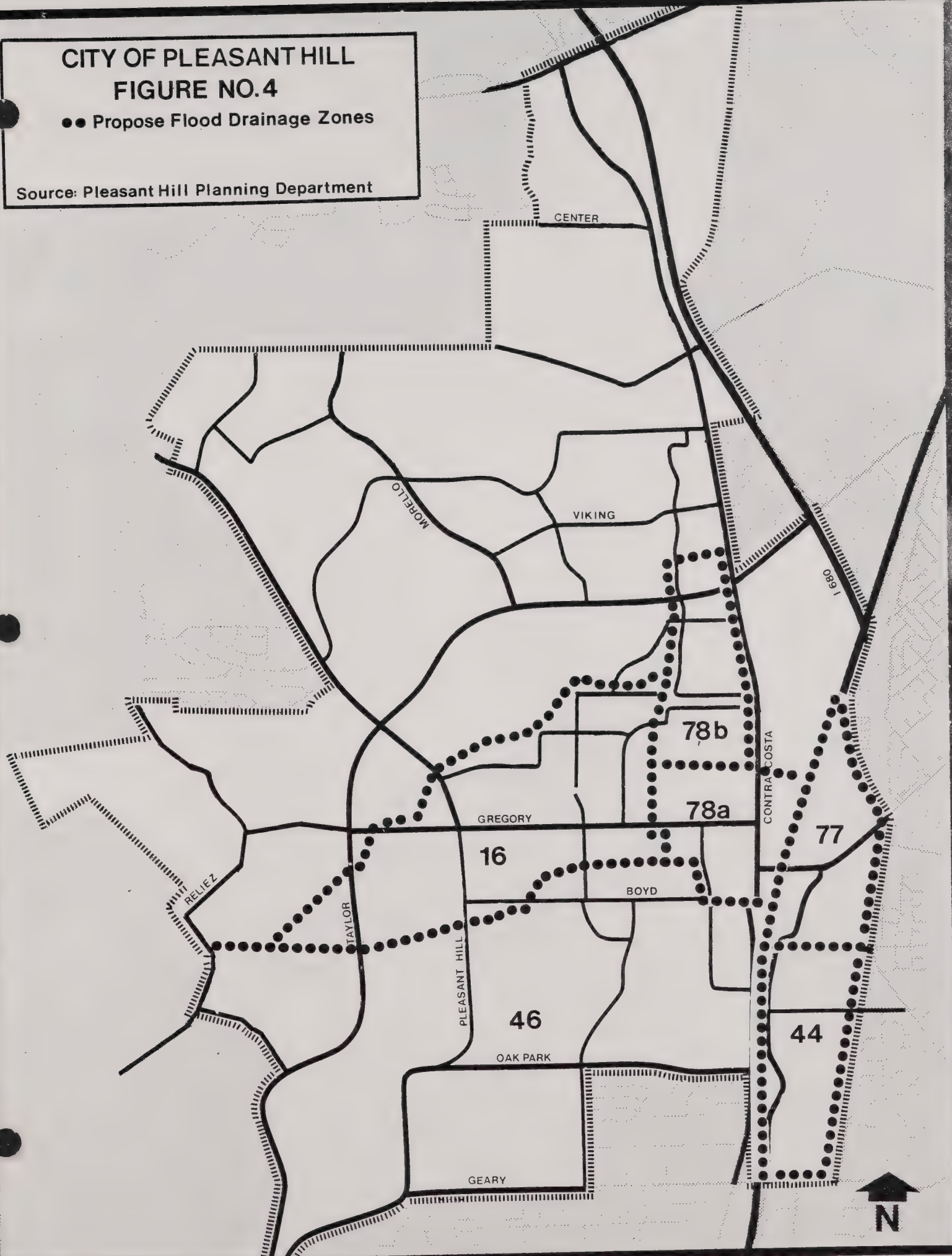




**CITY OF PLEASANT HILL  
FIGURE NO.4**

●● Propose Flood Drainage Zones

Source: Pleasant Hill Planning Department



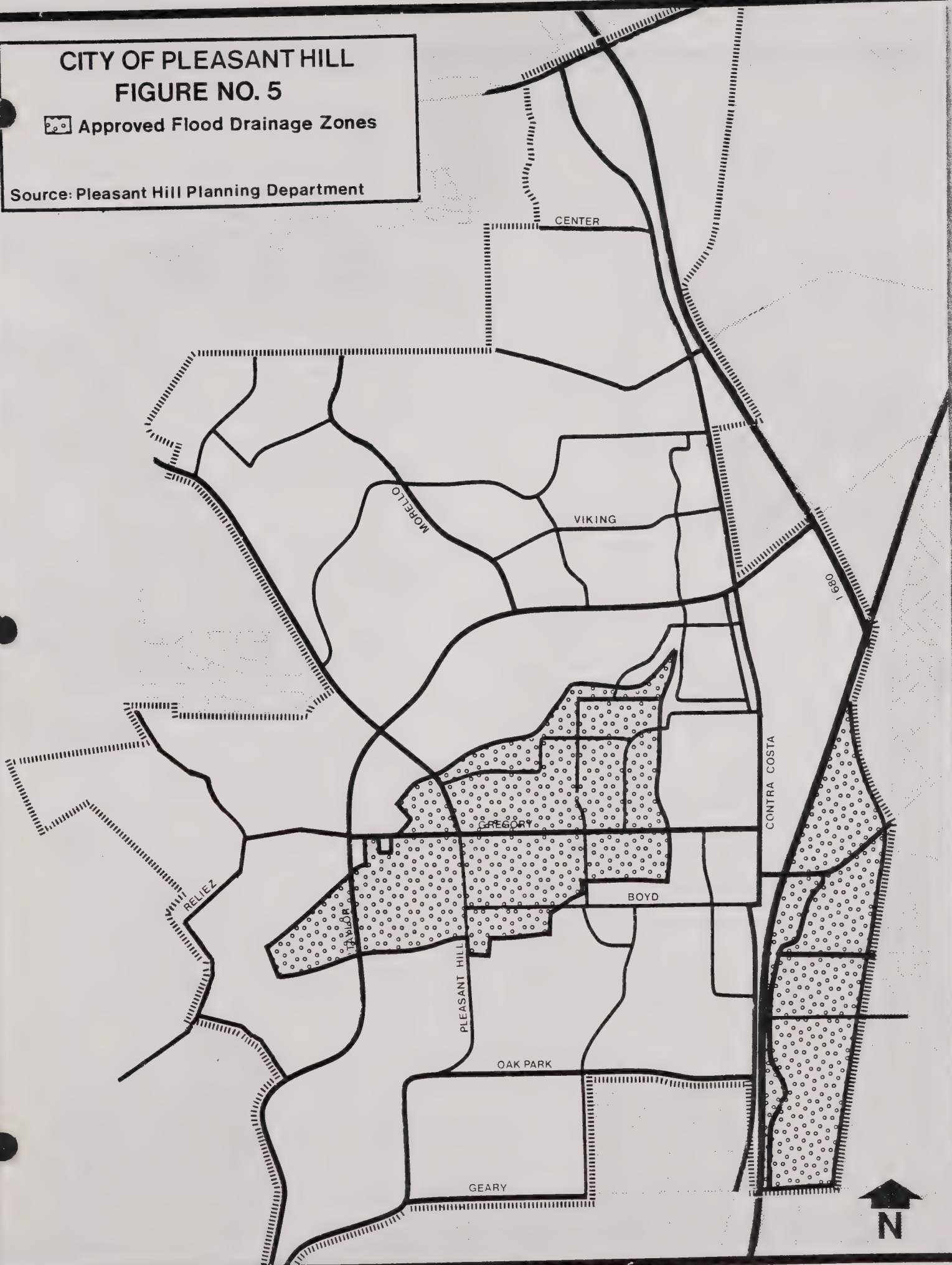




**CITY OF PLEASANT HILL  
FIGURE NO. 5**

 **Approved Flood Drainage Zones**

Source: Pleasant Hill Planning Department







The obstacle to enacting the final three storm drainage zones was the funding necessary to carry out the proposed improvements. In Pleasant Hill, where most development has already occurred, the cost must be borne by the existing residents. The costs of the improvements have many residents reluctant to take on the fiscal responsibility to mitigate drainage and flood hazards.

Even though funds have been limited, the Pleasant Hill Public Works Department has engaged in long-term capital improvement programs for projects that were of critical concern in the storm drainage districts. It was expected that between 1979 and 1982 the City would have expended more than \$450,000 to improve storm drainage channels.

The combination of voter resistance to the formation of the final three districts, financial limitations imposed by State tax initiatives and the Flood Control District's control over major projects means that few improvements can be expected to be built in the immediate future.

Finally, the Department of Housing and Urban Development (HUD) and the National Flood Insurance Program have developed maps which delineate the areas prone to 100 year floods and programs for insurance for residence within these areas. The flood maps were prepared in the early 1970's and revised in 1976 and again in 1982. The latest review was undertaken because of new construction and public works projects which have changed the affected areas. The latest map shows encroachment areas of the 100 and 500 year floods, and flood elevations as well (see attached map).

#### Implementation Programs

- D.1 The City shall continue to encourage the formation of Storm Drainage District Zones 46, 78a and 78b.
- D.2 The Public Works Department shall continue to develop, update and implement a capital improvement program for drainage to eliminate the most important drainage problems.
- D.3 The Public Works Department shall continue its annual inspection, informing residents of illegal structures and debris that must be removed.
- D.4 The City shall continue participation in the National Flood Insurance Program.

If the measures outlined previously in this element are not sufficient to deter a major natural disaster then the City must be able to respond immediately and effectively; to this end the California Emergency Service Act requires each County and City to prepare an emergency plan. The City in cooperation with the County's Office of Emergency Service has prepared and updated a plan for such services. The City's portion of the Emergency Plan is primarily designed to establish an organizational framework to enable the City to respond to emergencies and coordinate with County and State agencies. In that regard, effective communication is the primary objective of the emergency plan. The plan to accomplish this end must be constantly reviewed and updated by all personnel responsible for specific tasks. As personnel enter and leave City service, training new personnel is of prime concern. The plan can be well written, but ineffective if the key individuals are not aware of their roles.

#### POLICY "D" Drainage Channels

*Work in cooperation with the Flood Control District to provide free and unobstructed water flow to collector channels.*



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POLICY "E" Disaster Planning and Education

*Conduct disaster education and planning as an ongoing process, integrated with County and regional activities.*

Implementation Programs

- E.1 Continually update and modify the City's disaster plan to deal with seismic and other natural disasters.
- E.2 All City departments shall participate in annual disaster exercises with the other jurisdictions in the County.
- E.3 Institute programs to educate the public about the existence of hazards and about appropriate actions to be taken in the case of an emergency. These programs should utilize such organizations as the Civic Action Committee, the Community Action Network, and publications such as the Outlook.

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